UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,134	06/19/2001	Armin Sitte	12758-022001	3761

26161 7590 07/13/2005

FISH & RICHARDSON PC
225 FRANKLIN ST
BOSTON, MA 02110

EXAMINER	
MATTIS, JASON E	

ART UNIT	PAPER NUMBER
2665	

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/806,134	SITTE ET AL.	
	Examiner	Art Unit	
	Jason E. Mattis	2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *13 April 2005*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-23* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-23* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. This Office Action is in response to the amendment filed on 4/13/05. Claims 1-23 are currently pending in the application.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 7-10, 12-14, and 16-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Roobol et al. (U.S. Pat. 6363058).

With respect to claim 1, Roobol et al. discloses a method for use in a wireless communications system of transmitting data for a plurality of services between a base station and a subscriber station **(See column 2 line 59 to column 3 line 3 and Figure 1 of Roobol et al. for reference to transmitting data between a base station 3 and a mobile station 2, which is a subscriber station, using a transceiver pair 5)**. Roobol et al. also discloses that data for a plurality of services is transmitted as a frame comprised of blocks in a frame **(See column 5 lines 41-55 and Figure 6 of Roobol et**

al. for reference to multiplexing data blocks, RLC/MAC PDUs 165, from multiple radio bearer services into a single frame, transmission block 145, so that the data for the services is transmitted simultaneously). Roobol et al. further discloses setting a service-specific block size as a smallest transmission unit for data from each of the plurality of services transmitted in the frame **(See column 4 line 39 to column 5 line 65 and Figures 4-6 of Roobol et al. for reference to multiplexing data of the same service type into a single transmission block 145 and for reference to the transmission block being made up of a number of fixed sized RLC/MAC PDUs 165, meaning, since data of each different service type is multiplexed together with only like data and since each transmission block 145 is made up of fixed sized RLC/MAC PDUs 165, the size of the fixed sized RLC/MAC PDUs of a particular transmission block 145 is a set service-specific smallest block size for the data of the service in the particular transmission block 145)**. Roobol et al. also discloses outputting a signal that indicates a number of blocks of data per service to be transmitted in the frame **(See column 4 line 65 to column 5 line 40 of Roobol et al. for reference to the number of RLC/MAC PDUs 165 within a transmission block 145 being variable depending on the transmission rate and interleaving length, which both define a transmission format that is used to transmit the data between the mobile station 2 and the base station 3, meaning, since the transmission format must be signaled to the device receiving the data in order for the data to be correctly decoded, that the number of RLC/MAC PDUs 165 within a transmission block 145 is also inherently signaled as a part of the transmission**

format). Roobol et al. further discloses obtaining an arrangement of blocks of data for the plurality of services in the frame based on the number of blocks of data per service and a predetermined coding and entering the blocks of data in the frame in accordance with the predetermined coding **(See column 3 lines 17-25 column 5 lines 41-65 and Figures 2 and 6 of Roobol et al. for reference to, based on the transmission format, which defines a number of RLC/MAC PDUs 165 for a service in a transmission block 145, based on prioritizing, and based on predetermined coding of the algorithms of a management plane 25, which is used to control the RLC/MAC protocol and the creation of transmission blocks 145, arranging and entering the RLC/MAC PDUs 165 from the services into a transmission block 145)**. Roobol et al. also discloses transmitting from the base station, the frame and reading, at the subscriber station, the data from the frame **(See column 2 line 59 to column 3 line 25 and Figures 1 and 2 of Roobol et al. for reference to transmitting and reading, at the receiving end, data from of multiple services according to the RLC/MAC protocol)**.

With respect to claim 12, Roobol et al. discloses a wireless communications system comprising a base station, a radio interface, and a subscriber station connected to the base station via a wireless connection **(See column 2 line 59 to column 3 line 3 and Figure 1 of Roobol et al. for reference to transmitting data between a base station 3 and a mobile station 2, which is a subscriber station, using a transceiver pair 5, which is a radio interface)**. Roobol et al. also discloses the base station transmitting blocks of data for a plurality of services **(See column 5 lines 41-55 and**

Figure 6 of Roobol et al. for reference to multiplexing data blocks, RLC/MAC PDUs 165, from multiple radio bearer services into a single frame, transmission block 145, so that the data for the services is transmitted simultaneously). Roobol et al. further discloses using a service-specific block size as a smallest transmission unit for data per service **(See column 4 line 39 to column 5 line 65 and Figures 4-6 of Roobol et al. for reference to multiplexing data of the same service type into a single transmission block 145 and for reference to the transmission block being made up of a number of fixed sized RLC/MAC PDUs 165, meaning, since data of each different service type is multiplexed together with only like data and since each transmission block 145 is made up of fixed sized RLC/MAC PDUs 165, the size of the fixed sized RLC/MAC PDUs of a particular transmission block 145 is a set service-specific smallest block size for the data of the service in the particular transmission block 145)**. Roobol et al. also discloses a signaling means that outputs a signal that indicates a number of blocks of data per service to be transmitted **(See column 4 line 65 to column 5 line 40 of Roobol et al. for reference to the number of RLC/MAC PDUs 165 within a transmission block 145 being variable depending on the transmission rate and interleaving length, which both define a transmission format that is used to transmit the data between the mobile station 2 and the base station 3, meaning, since the transmission format must be signaled to the device receiving the data in order for the data to be correctly decoded, that the number of RLC/MAC PDUs 165 within a transmission block 145 is also inherently signaled as a part of the transmission format)**. Roobol et al. further

discloses a coding means that enters the blocks of data in the frame in accordance with a predetermined coding, the plurality of services, and the number of blocks of data per service **(See column 3 lines 17-25 column 5 lines 41-65 and Figures 2 and 6 of Roobol et al. for reference to, based on the transmission format, which defines a number of RLC/MAC PDUs 165 for a service in a transmission block 145, based on prioritizing, and based on predetermined coding of the algorithms of a management plane 25, which is used to control the RLC/MAC protocol and the creation of transmission blocks 145, arranging and entering the RLC/MAC PDUs 165 from the services into a transmission block 145)**. Roobol et al. also discloses a transmission mean, that transmits the frame to the subscriber station, and a decoding means, that reads the data from the frame **(See column 2 line 59 to column 3 line 25 and Figures 1 and 2 of Roobol et al. for reference to transmitting and reading, at the receiving end, data from of multiple services according to the RLC/MAC protocol)**.

With respect to claim 18, Roobol et al. discloses a method of transmitting data for a plurality of services **(See column 5 lines 41-55 and Figure 6 of Roobol et al. for reference to multiplexing data blocks, RLC/MAC PDUs 165, from multiple radio bearer services into a single frame, transmission block 145, so that the data for the services is transmitted simultaneously)**. Roobol et al. also discloses establishing a service specific block size for use as a smallest transmission unit for data from each of the plurality of services, with the data being transmitted in blocks in a frame **(See column 4 line 39 to column 5 line 65 and Figures 4-6 of Roobol et al.**

for reference to multiplexing data of the same service type into a single transmission block 145 and for reference to the transmission block being made up of a number of fixed sized RLC/MAC PDUs 165, meaning, since data of each different service type is multiplexed together with only like data and since each transmission block 145 is made up of fixed sized RLC/MAC PDUs 165, the size of the fixed sized RLC/MAC PDUs of a particular transmission block 145 is a set service-specific smallest block size for the data of the service in the particular transmission block 145). Roobol et al. further discloses determining a number of blocks in the frame based on the service-specific block size for each of the plurality of services **(See column 4 line 65 to column 5 line 40 of Roobol et al. for reference to the number of RLC/MAC PDUs 165 within a transmission block 145 being variable depending on the transmission rate and interleaving length, which both define a transmission format that is used to transmit the data between the mobile station 2 and the base station 3, meaning that the number of RLC/MAC PDUs 165 in each transmission block is determined based on the transmission format)**. Roobol et al. discloses outputting a signal indicating a number of block of data per service transmitted in the frame **(See column 4 line 65 to column 5 line 40 of Roobol et al. for reference to the number of RLC/MAC PDUs 165 within a transmission block 145 being variable depending on the transmission rate and interleaving length, which both define a transmission format that is used to transmit the data between the mobile station 2 and the base station 3, meaning, since the transmission format must be signaled to the device receiving the data in order for the data to**

be correctly decoded, that the number of RLC/MAC PDUs 165 within a transmission block 145 is also inherently signaled as a part of the transmission format). Roobol et al. also discloses entering the blocks in the frame based on the number of blocks and a predetermined coding **(See column 3 lines 17-25 column 5 lines 41-65 and Figures 2 and 6 of Roobol et al. for reference to, based on the transmission format, which defines a number of RLC/MAC PDUs 165 for a service in a transmission block 145, based on prioritizing, and based on predetermined coding of the algorithms of a management plane 25, which is used to control the RLC/MAC protocol and the creation of transmission blocks 145, arranging and entering the RLC/MAC PDUs 165 from the services into a transmission block 145)**. Roobol et al. further discloses transmitting the frame to the receiver via a wireless connection **(See column 2 line 59 to column 3 line 25 and Figures 1 and 2 of Roobol et al. for reference to transmitting and reading, at the receiving end, data from of multiple services using a transceiver pair 5, which is part of a wireless connection, according to the RLC/MAC protocol)**.

With respect to claim 21, Roobol et al. discloses an apparatus to transmit data for a plurality of services in a frame **(See column 5 lines 41-55 and Figure 6 of Roobol et al. for reference to multiplexing data blocks, RLC/MAC PDUs 165, from multiple radio bearer services into a single frame, transmission block 145, so that the data for the services is transmitted simultaneously)**. Roobol et al. also discloses setting a service-specific block size as a smallest transmission unit for data from each of the plurality of services, with the data being transmitted in blocks in the

frame **(See column 4 line 39 to column 5 line 65 and Figures 4-6 of Roobol et al. for reference to multiplexing data of the same service type into a single transmission block 145 and for reference to the transmission block being made up of a number of fixed sized RLC/MAC PDUs 165, meaning, since data of each different service type is multiplexed together with only like data and since each transmission block 145 is made up of fixed sized RLC/MAC PDUs 165, the size of the fixed sized RLC/MAC PDUs of a particular transmission block 145 is a set service-specific smallest block size for the data of the service in the particular transmission block 145)**. Roobol et al. further discloses obtaining an arrangement of the blocks of data for the plurality of services in the frame based on a number of blocks of data per services an a predetermined coding and entering the blocks of data in the frame in accordance with the predetermined coding **(See column 3 lines 17-25 column 5 lines 41-65 and Figures 2 and 6 of Roobol et al. for reference to, based on the transmission format, which defines a number of RLC/MAC PDUs 165 for a service in a transmission block 145, based on prioritizing, and based on predetermined coding of the algorithms of a management plane 25, which is used to control the RLC/MAC protocol and the creation of transmission blocks 145, arranging and entering the RLC/MAC PDUs 165 from the services into a transmission block 145)**. Roobol et al. also discloses a signaling circuit to output a signal indicating a number of blocks per service transmitted in the frame **(See column 4 line 65 to column 5 line 40 of Roobol et al. for reference to the number of RLC/MAC PDUs 165 within a transmission block 145 being variable depending on**

the transmission rate and interleaving length, which both define a transmission format that is used to transmit the data between the mobile station 2 and the base station 3, meaning, since the transmission format must be signaled to the device receiving the data in order for the data to be correctly decoded, that the number of RLC/MAC PDUs 165 within a transmission block 145 is also inherently signaled as a part of the transmission format). Roobol et al. further discloses a transmitting circuit to transmit the frame via a wireless connection **(See column 2 line 59 to column 3 line 25 and Figures 1 and 2 of Roobol et al. for reference to transmitting and reading, at the receiving end, data from of multiple services using a transceiver pair 5, which is part of a wireless connection, according to the RLC/MAC protocol).**

With respect to claims 2, 13, and 22, Roobol et al. discloses that the predetermined coding corresponds to a sequence of the blocks of data for the plurality of services **(See column 3 lines 17-25 column 5 lines 41-65 and Figures 2 and 6 of Roobol et al. for reference to sequencing the RLC/MAC PDUs of a transmission block based on the transmission format, prioritizing, and predetermined coding of the algorithms of a management plane 25, which is used to control the RLC/MAC protocol and the creation of transmission blocks 145).**

With respect to claims 3 and 14, Roobol et al. discloses that the predetermined coding corresponds to a number of transmission channels that are used simultaneously between the base station and the subscriber station **(See column 4 lines 20-54 of Roobol et al. for reference to, according to the RLC/MAC protocol, only**

transmitting data of the same service type in a single channel, meaning that, due to this protocol rule, the number of transmission channels which are used simultaneously between the base station 3 and the mobile station 2 is set at the number of different service types being used by the mobile station 2).

With respect to claims 7 and 16, Roobol et al. discloses that the number of blocks of data per service varies from frame to frame in increments having different sizes **(See column 5 lines 24-40 of Roobol et al. for reference to the number of RLC/MAC PDUs per service in each transmission block 145 being variable based on the transmission format, which can create more or less RLC/MAC PDUs in steps of a different size)**.

With respect to claim 8, Roobol et al. discloses that the predetermined coding is defined of a system-wide basis **(See column 3 lines 4-25 and column 5 lines 24-40 of Roobol et al. for reference to the transmission formats being based on a system wide RLC/MAC protocol, which is used to transmit data)**.

With respect to claims 9 and 17, Roobol et al. discloses that the predetermined coding is defined when setting up a connection between the base station and the subscriber station **(See column 5 liens 24-40 of Roobol et al. for reference to using different transmission formats, which must be defined before when a connection is set up so that data can be correctly transmitted and decoded by both the base station 3 and the mobile station 2)**.

With respect to claim 10, Roobol et al. discloses that the coding reduces a number of transmission channels per connection between the base station and the

subscriber station **(See column 4 lines 39-54 of Roobol et al. for reference to multiplexing data of the same service type in the same transmission block 145, which means that if a connection between a base station and a mobile station contains data from two of the same type of service, this data will be transmitted in the same channel, thus reducing the number of transmission channels needed for the connection)**.

With respect to claim 20, Roobol et al. discloses receiving the frame at the receiver and reading the data at the receiver **(See column 2 line 59 to column 3 line 25 and Figures 1 and 2 of Roobol et al. for reference to transmitting and reading, at the receiving end, data from of multiple services according to the RLC/MAC protocol)**.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 4, 15, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roobol et al. in view of Stewart et al. (U.S. Pat. 6009091).

With respect to claims 4, 15, and 23, Roobol et al. discloses that the frame is transmitted via a plurality of broadband transmission channels **(See column 4 liens 20-54 of Roobol et al. for reference to transmitting data in a plurality of different channels)**. Roobol et al. does not specifically disclose a spread factor used in the plurality of transmission channels.

With respect to claims 4, 15, and 23, Stewart et al., in the field of communications, discloses indicating a spread factor used in a plurality of transmission channels **(See column 3 line 62 to column 4 line 17 of Stewart et al. for reference to assigning spreading codes for used by different channels in a wireless communications system)**. Indicating a spread factor used in a plurality of transmission channels had the advantage of allowing bandwidth to be efficiently used by using orthogonal spreading codes to create multiple channels.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Stewart et al., to combine indicating a spread factor using in a plurality of transmission channels, as suggested by Stewart et al., with the system and method of Roobol et al., with the motivation being to allow bandwidth to be efficiently used by using orthogonal spreading codes to create multiple channels.

5. Claims 5 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Roobol et al. in view of Whitehead (U.S. Pat. 5732077).

With respect to claim 5, Roobol et al. does not disclose that the number of blocks of data per service in the frame is signaled as an absolute statement.

With respect to claim 5, Whitehead, in the field of communications, discloses a method for transmitting in a length sub-field, which indicates, as an absolute statement, the length, or amount of data in a wireless service data packet **(See column 6 lines 20-24 of Whitehead for reference to the length sub-field, which indicates the length of a packet to be transmitted)**. Transmitting the number of blocks per service in a frame as an absolute statement has the advantage of allowing the system to transmit a variable amount of data in each block, frame, or packet without requiring the system to remember, or store, information relating to the length of previous blocks, frames, or packets.

It would have been obvious to one of ordinary skill in the art at the time of the invention, when presented with the work of Whitehead, to combine signaling the number of blocks per service in a frame as an absolute statement, as suggested by Whitehead, with the wireless communication system and method of Roobol et al., with the motivation being to allow the system to transmit a variable amount of data in each block, frame, or packet without requiring the system to remember, or store, information relating to the length of previous blocks, frames, or packets.

With respect to claim 11, Roobol et al. does not disclose a block size of one bit.

With respect to claim 11, Whitehead, in the field of communications, discloses a wireless system and method have packets of any length **(See column 4 lines 11-15 of Whitehead for reference to data packet that are transmitted between pairs of**

stations being any length). Since data packets of any length, or any amount of bits, may be transmitted, the minimum block size, or smallest transmission unit for data, in the system and method of Whitehead is one bit. Having a block size of one bit has the advantage of allowing the maximum amount of flexibility to transmit data having any length or amount of bits.

It would have been obvious to one of ordinary skill in the art at the time of the invention, when presented with the work of Whitehead, to combine a block size of one bit, as suggested by Whitehead, with the wireless communication system and method of Roobol et al., with the motivation being to allow the maximum amount of flexibility to transmit data having any length or amount of bits.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roobol et al. in view of Crisler et al. (U.S. Pat. 5598417).

With respect to claim 6, Roobol et al. does not disclose that the number of blocks of data per service in each frame is signaled relative to a statement for a preceding frame.

With respect to claim 6, Crisler et al., in the field of communications, discloses a method of signaling the number of blocks in a frame relative to a statement for a preceding frame **(See column 6 liens 7-59 of Crisler et al. for reference to a method using time slots, which are blocks, in a transmission frame, and for reference to signaling a time slot allocation based on a number of time slots requested for use in the next frame, meaning that the number of slots to be used is signaled relative**

to the number of slots already in use, for example, if three slots are currently being used and one more slot is allocated, only the additional slot is signaled in the allocation). Signaling the number of blocks in a frame relative to a statement for a preceding frame has the advantage of requiring less data to be sent in the signal since only the newly allocated or deallocated blocks need to be signaled.

It would have been obvious for one of ordinary skill in the art at the time of the invention, when presented with the work of Crisler et al., to combine signaling the number of blocks in a frame relative to a statement for a preceding frame, as suggested by Crisler et al., with the system and method of Roobol et al., with the motivation being to require less data to be sent in the signal since only the newly allocated or deallocated blocks need to be signaled.

Response to Arguments

7. Applicant's arguments filed 4/13/05 have been fully considered but they are not persuasive.

In response to Applicant's argument that:

> "More specifically, while it is true that Roobol describes that the amount of data in transmission block 145 varies with time depending upon the transmission rate and interleaving length, there is nothing that necessarily requires the Roobol system to rely on a signal to indicate the amount of data being transmitted. Roobol could, conceivable, use other methods of

identifying PDUs including; e.g., the use of identifiers or the link in the data itself. For example, columns 5 and 6 of Roobol describe altering the transmission format and block priorities to account for variable transmission rates. While this portion of Roobol does not appear to directly address notifying a receiving station of variances in transmitting data, it does not indicate that the variability of the data is indicated in the data itself, which, conceivably, could be used by a receiver to identify PDUs." (See pages 9 and 10 of Applicant's Remarks section)

the Examiner respectfully disagrees. As stated in the rejection above, since the transmission format, including the number of block transmitted in a frame, varies from frame to frame, the receiver of a transmitted data frame must have knowledge of the current frame format, such that the frame may be properly decoded. Although, Roobol et al. does not specifically disclose how the receiver gains this knowledge, the receiver must inherently receive some signal the current transmission format, and thus, the number of blocks transmitted in a frame. The Applicant suggests "Roobol... could, conceivably, use... the use of identifiers or the like in the data itself." If this were the case, the identifiers sent in the data from the base station to the receiver would be a signal that is outputted indicating a number of blocks of data per service to be transmitted in the frame, as in the claim limitation. Regardless of how the current data format is signaled, there must be some identifying signal used by the receiver to determine the current data format and, thus, the number of blocks in a received frame. The current limitations of claims 1, 12, 18, and 21 do not detail a specific type or format

of such a signal, they only detail that there is a signal. Therefore, since Roobol et al. must use some identifying signal to rely the current frame format, Roobol et al. discloses all claim limitations of the independent claims 1, 12, 18, and 21.

Conclusion

8. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason E. Mattis whose telephone number is (571) 272-3154. The examiner can normally be reached on M-F 8AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

jem

HUY D. VU
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600